**ZOOLOGY - BS**

The Zoology degree program is designed to expose students to all aspects of the study of animals. Following foundation courses on the principles of vertebrate and invertebrate zoology, students may select from a broad range of classes in animal biology, ranging from cellular and developmental biology, physiology, and anatomy to ecology and evolution. Graduates enter into advanced studies in zoology, specialized zoological fields in agriculture and renewable resources, or such professional fields as medicine, veterinary medicine, dentistry and other health-related areas.

**Program Requirements**

### First Year

**Fall**

- **BIOL 111** Introductory Biology I 4
- **CHEM 101 & CHEM 111** Fundamentals of Chemistry I and Fundamentals of Chemistry Laboratory I 4
- **MATH 147** Calculus I for Biological Sciences 4
- Communication elective ([http://catalog.tamu.edu/undergraduate/general-information/university-core-curriculum/#communication](http://catalog.tamu.edu/undergraduate/general-information/university-core-curriculum/#communication)) 3

**Semester Credit Hours** 15

**Spring**

- **BIOL 112** Introductory Biology II 4
- **CHEM 102 & CHEM 112** Fundamentals of Chemistry II and Fundamentals of Chemistry Laboratory II 4
- **MATH 148** Calculus II for Biological Sciences 4
- Communication elective ([http://catalog.tamu.edu/undergraduate/general-information/university-core-curriculum/#communication](http://catalog.tamu.edu/undergraduate/general-information/university-core-curriculum/#communication)) 3

**Semester Credit Hours** 15

### Second Year

**Fall**

- **BIOL 213** Molecular Cell Biology 3
- **CHEM 227 & CHEM 237** Organic Chemistry I and Organic Chemistry Laboratory 4
- **PHYS 201** College Physics 4
- American history elective ([http://catalog.tamu.edu/undergraduate/general-information/university-core-curriculum/#american-history](http://catalog.tamu.edu/undergraduate/general-information/university-core-curriculum/#american-history)) 3

**Semester Credit Hours** 14

**Spring**

- **BIOL 214** Genes, Ecology and Evolution 3
- **CHEM 228 & CHEM 238** Organic Chemistry II and Organic Chemistry Laboratory 4
- **PHYS 202** College Physics 4

### Third Year

**Fall**

- **BICH 410 & BICH 412** Comprehensive Biochemistry I and Biochemistry Laboratory I 4
- **BIOL 318** Chordate Anatomy 4
- **STAT 302** Statistical Methods 3
- Elective 3

**Semester Credit Hours** 14

**Spring**

- **BICH 411** Comprehensive Biochemistry II 3
- **BIOL 388** Principles of Animal Physiology 4
- **GENE 302 & GENE 312** Principles of Genetics and Comprehensive Genetics Laboratory 4
- Social and behavioral science elective ([http://catalog.tamu.edu/undergraduate/general-information/university-core-curriculum/#social-behavioral-sciences](http://catalog.tamu.edu/undergraduate/general-information/university-core-curriculum/#social-behavioral-sciences)) 3

**Semester Credit Hours** 14

### Fourth Year

**Fall**

- **POLS 206** American National Government 4
- Selected a directed elective from the list below 5
- Language, philosophy and culture elective ([http://catalog.tamu.edu/undergraduate/general-information/university-core-curriculum/#language-philosophy-culture](http://catalog.tamu.edu/undergraduate/general-information/university-core-curriculum/#language-philosophy-culture)) 3
- Creative arts elective ([http://catalog.tamu.edu/undergraduate/general-information/university-core-curriculum/#creative-arts](http://catalog.tamu.edu/undergraduate/general-information/university-core-curriculum/#creative-arts)) 3
- Elective 3

**Semester Credit Hours** 18

**Spring**

- **BIOL 335** Invertebrate Zoology 4
- **BIOL 466** Principles of Evolution 3
- **POLS 207** State and Local Government 4

**Total Semester Credit Hours** 58

1. Students seeking teacher certification must take HIST 105 and HIST 106. Other students may choose HIST 105 and HIST 106 or any 6 hours of American history courses (3 hours may be in Texas history).

2. Students successfully completing the required four semesters of upper-level ROTC courses may substitute these courses for 3 hours of American history and 3 hours of government/political science.

The following are CBK courses and must be completed prior to the start of 5th full semester: BIOL 111, BIOL 112, BIOL 213, BIOL 214, CHEM 101 & CHEM 111, CHEM 102 & CHEM 112, CHEM 227 & CHEM 237, CHEM 228 & CHEM 238, MATH 147, MATH 148.
Select a directed elective from the list below

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Semester Credit Hours</th>
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<tbody>
<tr>
<td>OCNG 420</td>
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<td>3</td>
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Select from any 100-499 course not used elsewhere. (Except AGLS 101, BIMS 101; BIOL 101, BIOL 107, BIOL 113, BIOL 206; BUSN 100; CAEN 101-499 [http://catalog.tamu.edu/undergraduate/course-descriptions/caen]; CAEX 100-499; CHEM 106, CHEM 116; HORT 101; MATH 102; STLC 100-499 [http://catalog.tamu.edu/undergraduate/course-descriptions/stlc]; WFSC 101.) Only one KINE 199 may be used as a general elective.

Students successfully completing the required four semesters of upper-level ROTC courses may substitute these courses for 3 hours of American history and 3 hours of government/political science.

Two courses in the major must be designated as writing intensive.

In order to qualify for the secondary provisional teaching certificate, see requirements listed in the College of Education and Human Development section under secondary certification.